

## ABSTRACT OF THE DISCLOSURE

A wavelength monitor capable of highly accurately and highly stably detecting a wavelength variation of a tunable laser source, and a motor control device for easily and highly precisely driving a motor which is wavelength varying means, by using the wavelength monitor. The wavelength monitor is a wavelength monitor for detecting a wavelength variation of light outputted from a tunable laser source, and includes a first polarizer for forming light outputted from the tunable laser source into a linearly polarized beam with a polarizing angle of 45 degrees, a beam splitter for dividing a beam transmitted through the polarizer into two beams, first reflecting means for reflecting one of the two beams divided by the beam splitter and causing the reflected one to again enter the beam splitter, a wave plate for performing  $\lambda/8$  phase-shifting, the wave plate allowing the other of the two beams divided by the beam splitter to double-pass through the wave plate by being reflected by a second reflecting plate and causing the other to enter the beam splitter, and a polarizing beam splitter for dividing output light recombined by the beam splitter into two mutually perpendicular components and outputting the respective components to the first and second photodetectors.